## CONTENTS

*Foreword* . . . . . vii
Industrial applications of dispersions
Th.F. Tadros (Bracknell, UK) . . . . . 1
Aerosols and microgravity
W. Holländer (Hannover, Germany) . . . . . 49
Influence of density differences between disperse and continuous phases on coagulation
L.L.M. Krutzer, R. Folkersma, A.J.G. van Diemen and H.N. Stein (Eindhoven, The Netherlands) . . . . . 59
Aggregation phenomena
M. Carpineti and M. Giglio (Milan, Italy) . . . . . 73
Theoretical aspects of particle interactions in dispersions
D. Langbein (Frankfurt am Main, Germany) . . . . . 91
Formation, properties and fractal structure of particle gels
L.G.B. Bremer, B.H. Bijsterbosch, P. Walstra and T. van Vliet (Wageningen, The Netherlands) . . . . . 117
The effects of gravity on the aggregation and the gelation of colloids
C. Allain and M. Cloitre (Orsay, France) . . . . . 129
Water in oil colloidal droplets used as microreactors
M.-P. Pileni (Paris, France) . . . . . 139
Time-resolved light scattering studies on protein percrystallization fractal clusters
Y. Georgalis and W. Saenger (Berlin, Germany) . . . . . 165
Terrestrial and microgravity studies with nanoconductor networks: basic principles and applications of "huge molecule van der Waals gases"
P. Marquardt and J. Schilz (Köln, Germany) . . . . . 185
*In-situ* organization of nanoparticles by scanning force microscopy under terrestrial and microgravity conditions
E. Hartmann, P. Marquardt, J. Ditterich and H. Steinberger (Munich, Germany) . . . . . 221
Magnetic fluids
S. Odenbach (Munich, Germany) . . . . . 263
Dispersion rheology at microgravity: what can it teach us?
H.N. Stein (Eindhoven, The Netherlands) . . . . . 283
Dispersions in metallic systems
L. Froyen, P. Lust and L. Delaey (Leuven, Belgium) . . . . . 297
Light scattering — diagnostic methods for colloidal dispersions
K. Schätzel (Mainz, Germany) . . . . . 309
Data accuracy and resolution in particle sizing by dynamic light scattering
H. Ruf (Frankfurt, Germany) . . . . . 333
*Conclusions* . . . . . 343